

32. The aerial vehicle of claim **31**, wherein the image output device is further coupled to the screen such that the image output device moves in response to movement of the screen.

33. An aerial vehicle comprising:

- a frame;
- a propulsion system operably coupled to the frame and configured to propel the aerial vehicle in response to a command from a remote device;
- a docking station configured to receive a mobile electronic device, wherein the mobile electronic device is configured to display a first image; and
- a first mirror movably coupled to the frame, wherein the first mirror is arranged to reflect the first image displayed by mobile electronic device towards a surface.

34. The aerial vehicle of claim **33**, further comprising:

- a second mirror movably coupled to the frame, wherein the second mirror is arranged to reflect a second image, from an environment of the aerial vehicle, towards an image capturing component of the mobile electronic device.

35. The aerial vehicle of claim **33**, wherein a speaker of the mobile electronic device outputs audio based on audio data, and wherein a microphone of the mobile electronic device receives an audio input from the environment of the aerial vehicle.

36. The aerial vehicle of claim **33**, further comprising a projector configured to project a second image onto the first mirror such that the first mirror reflects the second image towards the surface.

37. A method comprising:

- operating an image output device coupled to an aerial vehicle to project an image onto a surface;
- measuring in real-time an orientation of the surface with respect to the image output device;
- determining, based on the measured orientation, that the image projected onto the surface is distorted;
- in response to determining that the image is distorted, determining in real-time an adjustment to the image output device at which the image is not distorted on the surface; and
- adjusting the image output device according to the determined adjustment.

38. The method of claim **37**, wherein the image output device is coupled to the aerial vehicle via an adjustable coupling mechanism, wherein determining in real-time an adjustment to the image output device comprises determining an orientation of the image output device at which the image is not distorted on the surface, and wherein adjusting the image output device comprises adjusting the adjustable coupling mechanism to orient the image capturing device at the determined orientation.

39. The method of claim **37**, wherein determining in real-time an adjustment to the image output device is further in response to detecting a movement of the surface.

40. The method of claim **37**, wherein determining based on the measured orientation that the image is distorted on the screen comprises determining based on the measured orientation that an area of the image on the screen is larger than a predetermined area.

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